

REMARKS

In the Office action mailed April 11, 2005, the examiner allowed claims 17 and 32, objected to claims 3-5, 10, 20-22, and 27 and rejected claims 1, 2, 6-9, 11-16, 18, 19, 23-26, and 28-31. This reply cancels claims 6 and 23 and amends claims 1-5, 7, 10-13, 15, 18-22, 24, 27-28, and 30. Thus, claims 1-5, 7-22, and 24-32 are pending and under consideration.

I. Response to § 102 rejections

The examiner rejected claims 1, 2, 11, 12, 13, 18, 19, and 28 under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,556,169 ("Fukuura"). These rejections are respectfully traversed.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.

M.P.E.P. § 2131.

A. Claims 1, 2, 18, and 19

Claims 1 and 18 are patentable over Fukuura at least because Fukuura does not disclose numerous features of the claims. First, the claims recite "a junction conductor with a pillar portion and a flange portion." Fukuura does not disclose this feature. Although Fukuura teaches a "through conductor" in figure 1 as part 7a, this "through conductor" is not comparable to a junction conductor with a pillar portion and a flange portion.

The claims also recite a flange portion "connected to a feeding conductor on said circuit base board." As Fukuura does not disclose a flange portion, Fukuura also does not disclose this detail regarding the flange portion.

Further, claims 1 and 18 recite a dielectric substrate that "includes a through hole for letting the pillar portion of said junction conductor pierce therein and a space portion for housing said flange portion." Fukuura does not disclose this feature. Although Fukuura teaches openings in a grounding layer (see figure 1, 8a and 8b), these openings do not correspond to this feature of claim 1 because the openings are filled with the same material forming dielectric board 4.

Additionally, Fukuura does not disclose an antenna element and a dielectric substrate mounted on a circuit base board. As Fukuura does not disclose this and the other features of the claims pointed out above, claims 1 and 18 are patentable over Fukuura.

Claims 2 and 19 depend upon claims 1 and 18 respectively. Thus, claims 2 and 19 are patentable over Fukuura for at least the same reasons claims 1 and 18 are patentable over Fukuura.

Further regarding claims 2 and 19, the claims recite a "recess portion" and recite features regarding the connection of the flange portion to a feeding conductor. Fukuura does not disclose these features. Although Fukuura discloses a system where a through conductor penetrates a grounding layer through an opening, this system is not comparable to these features of claims 2 and 19.

B. Claims 11 and 12

Claims 11 and 12 recite features similar to the features recited by claim 1. Thus, claims 11 and 12 are patentable over Fukuura for reasons similar to the reasons claim 1 is patentable over Fukuura.

Furthermore, claims 11 and 12 recite bonding a base board and a dielectric substrate using an elastically adhesive material. The examiner admits that Fukuura does not teach this feature on page 6, lines 3-4 of the Office action. Although the examiner asserts that Fukuura in view of Sakota teaches or suggests this feature, this assertion is incorrect at least because Sakota does not disclose material that is "elastically" adhesive.

C. Claims 13 and 28

Claims 13 and 38 are patentable over Fukuura at least because Fukuura does not disclose numerous features of the claims. First, the claims recite "a junction conductor with a pillar portion and a flange portion." As explained above, Fukuura does not disclose this feature.

The claims also recite a flange portion connected to a feeding conductor. As explained above, Fukuura does not disclose this feature.

Further, the claims recite a conductor layer disposed on a lower face side of a feeding conductor having "a conductor removal part that has removed said conductor layers adjacent to a connecting portion of said junction conductor and said feeding conductor." Fukuura does not disclose anything comparable to this feature.

II. Response to § 103 rejections

The examiner rejected claims 6, 7, 23, and 24 under 35 U.S.C. § 103(a) as unpatentable

over Fukuura in view of European Published Patent Application No. EP 1 096 601 ("Ueoka"). The examiner also rejected claims 8, 9, 14, 16, 25, 26, 29, and 31 under 35 U.S.C. § 103(a) as unpatentable over Fukuura in view of U.S. Patent No. 6,388,623 ("Sakota"). Finally, the examiner rejected claims 9, 16, 26, and 31 under 35 U.S.C. § 103(a) as unpatentable over Fukuura in view of Sakota and further in view of U.S. Patent Application Publication No. 2003/0020657 ("Sakamoto"). These rejections are respectfully traversed.

Regarding claims 6 and 23, this reply cancels claims 6 and 23. Thus, the rejections of claims 6 and 23 is now moot.

Regarding claims 7-9, 14, 16, 24-26, 29, and 31, these claims depend upon claims 1, 13, 18, and 28 respectively. Neither Ueoka, Sakota, nor Sakamoto disclose anything that suggests modifying Fukuura to overcome the deficiencies discussed above. Therefore, these claims are patentable over any combination of Fukuura, Ueoka, Sakota, and Sakamoto.

Further regarding claims 8, 9, 14, 16, 25, 26, 29, 31, and 23, these claims recite an "elastically" adhesive material. Sakota does not teach or suggest this feature. Although Sakota teaches bonding using adhesive or resin, nowhere does Sakota teach an "elastically" adhesive material.

III. Response to § 112 rejection

The examiner rejected claims 15 and 30 under 35 U.S.C. § 112, second paragraph. This reply responds to the rejection by amending claims 15 and 30.

IV. Response to claim objections

The examiner objected to claims 3-5, 10, 20-22, and 27 as being depending upon a rejected base claim. The examiner indicated that these claims would be allowable if rewritten in independent form including all the limitations of their base claims and any intervening claims. These claims are patentable because they have been rewritten in independent form.

V. Conclusion

There being no further outstanding objections or rejections, it is submitted that the

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application is in condition for allowance. An early action to that effect is courteously solicited.

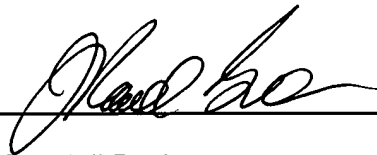
Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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